

**PATENT COOPERATION TREATY****PCT****INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

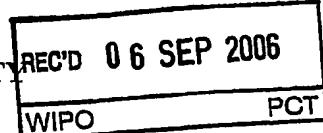
|  |   |   |                  |
|--|---|---|------------------|
| Applicant's or agent's file reference<br>42933/288165  | <b>FOR FURTHER ACTION</b>   |   | See item 4 below |
| International application No.<br>PCT/IB2005/000576   | International filing date ( <i>day/month/year</i> )<br>03 March 2005 (03.03.2005) | Priority date ( <i>day/month/year</i> )<br>10 March 2004 (10.03.2004) |                  |
| International Patent Classification (8th edition unless older edition indicated)<br>See relevant information in Form PCT/ISA/237 |   |   |                  |
| Applicant<br><b>NOKIA CORPORATION</b>  |   |   |                  |

|  |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
|--|---|---------------------|-------------------------------------|----------|--------------------------------------|--|-------------------------------------|----------------------------|---|---|-------------------------------------|-------------------------|--------------------------------------|--|---------------------------------------|---|
| <p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>  |   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <p>3. This report contains indications relating to the following items:</p> <table> <tbody> <tr> <td><input checked="" type="checkbox"/> Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/> Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/> Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/> Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/> Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/> Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/> Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/> Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </tbody> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p> | <input checked="" type="checkbox"/> Box No. I   | Basis of the report | <input type="checkbox"/> Box No. II | Priority | <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability | <input type="checkbox"/> Box No. IV | Lack of unity of invention | <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | <input type="checkbox"/> Box No. VI | Certain documents cited | <input type="checkbox"/> Box No. VII | Certain defects in the international application | <input type="checkbox"/> Box No. VIII | Certain observations on the international application |
| <input checked="" type="checkbox"/> Box No. I  | Basis of the report   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. II  | Priority  |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. III   | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. IV  | Lack of unity of invention  |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input checked="" type="checkbox"/> Box No. V  | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. VI  | Certain documents cited   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. VII   | Certain defects in the international application  |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |
| <input type="checkbox"/> Box No. VIII  | Certain observations on the international application   |                     |                                     |          |                                      |  |                                     |                            |   |   |                                     |                         |                                      |  |                                       |   |

|   |   |
|---|---|
|   | Date of issuance of this report<br>18 October 2006 (18.10.2006)         |
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland<br><br>Facsimile No. +41 22 338 82 70 | Authorized officer<br><br><b>Cecile Chatel</b><br>e-mail: pt13@wipo.int |

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY



PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

|                                     |              |
|-------------------------------------|--------------|
| Date of mailing<br>(day/month/year) | 31 -08- 2006 |
|-------------------------------------|--------------|

|  |   |
|--|---|
| Applicant's or agent's file reference<br><b>42933/288165</b> | FOR FURTHER ACTION<br>See paragraph 2 below |
|--|---|

|   |   |   |
|---|---|---|
| International application No.<br><b>PCT/IB2005/000576</b> | International filing date (day/month/year)<br><b>03 -03 -2005</b> | Priority date (day/month/year)<br><b>10 -03 -2004</b> |
|---|---|---|

International Patent Classification (IPC) or both national classification and IPC  
See Supplemental Box

|   |
|---|
| Applicant<br><b>Nokia Corporation et al</b> |
|---|

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

|   |                    |
|---|--------------------|
| Name and mailing address of the ISA/SE<br>Patent- och registreringsverket<br>Box 5055<br>S-102 42 STOCKHOLM | Authorized officer |
|---|--------------------|

|                               |                   |
|-------------------------------|-------------------|
| Faxsimile No. +46 8 667 72 88 | Anders Edlund /LR |
|-------------------------------|-------------------|

|                               |
|-------------------------------|
| Telephone No. +46 8 782 25 00 |
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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/IB2005/000576

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Cover sheet

**International patent classification (IPC)**

*H04L 29/06 (2006.01)*

*H04L 12/58 (2006.01)*

*H04L 29/12 (2006.01)*

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/IB2005/000576

| Box No. I      Basis of this opinion  |
|---|
| <p>1. With regard to the language, this opinion has been established on the basis of:</p> <p><input checked="" type="checkbox"/> the international application in the language in which it was filed</p> <p><input type="checkbox"/> a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).</p> <p>2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</p> <p>a. type of material</p> <p><input type="checkbox"/> a sequence listing</p> <p><input type="checkbox"/> table(s) related to the sequence listing</p> <p>b. format of material</p> <p><input type="checkbox"/> on paper</p> <p><input type="checkbox"/> in electronic form</p> <p>c. time of filing/furnishing</p> <p><input type="checkbox"/> contained in the international application as filed.</p> <p><input type="checkbox"/> filed together with the international application in electronic form.</p> <p><input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.</p> <p>3. <input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p> <p>4. Additional comments:</p> |

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

|                               |
|-------------------------------|
| International application No. |
| PCT/IB2005/000576             |

|  |  |                  |     |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |
|--|--|------------------|-----|-------------|--------|-------------|-----|--------|-------|--|--|---------------------|--------|------------------|-----|--------|-----------------------------------|--|--|-------------------------------|--------|-------------|-----|--------|-------|--|--|
| Box No. V  | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |                  |     |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |
| <p><b>1. Statement</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; padding-bottom: 5px;">Novelty (N)</td> <td style="width: 25%; padding-bottom: 5px;">Claims</td> <td style="width: 25%; padding-bottom: 5px;"><u>1-21</u></td> <td style="width: 25%; padding-bottom: 5px;">YES</td> </tr> <tr> <td style="padding-bottom: 5px;">Claims</td> <td colspan="3" style="padding-bottom: 5px;"><hr/></td> </tr> <tr> <td style="padding-bottom: 5px;">Inventive step (IS)</td> <td style="padding-bottom: 5px;">Claims</td> <td style="padding-bottom: 5px;"><u>6, 13, 20</u></td> <td style="padding-bottom: 5px;">YES</td> </tr> <tr> <td style="padding-bottom: 5px;">Claims</td> <td colspan="3" style="padding-bottom: 5px;"><u>1-5, 7-12, 14-19, 21</u> <hr/></td> </tr> <tr> <td style="padding-bottom: 5px;">Industrial applicability (IA)</td> <td style="padding-bottom: 5px;">Claims</td> <td style="padding-bottom: 5px;"><u>1-21</u></td> <td style="padding-bottom: 5px;">YES</td> </tr> <tr> <td style="padding-bottom: 5px;">Claims</td> <td colspan="3" style="padding-bottom: 5px;"><hr/></td> </tr> </table> |  |                  |     | Novelty (N) | Claims | <u>1-21</u> | YES | Claims | <hr/> |  |  | Inventive step (IS) | Claims | <u>6, 13, 20</u> | YES | Claims | <u>1-5, 7-12, 14-19, 21</u> <hr/> |  |  | Industrial applicability (IA) | Claims | <u>1-21</u> | YES | Claims | <hr/> |  |  |
| Novelty (N)  | Claims   | <u>1-21</u>      | YES |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |
| Claims   | <hr/>  |                  |     |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |
| Inventive step (IS)  | Claims   | <u>6, 13, 20</u> | YES |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |
| Claims   | <u>1-5, 7-12, 14-19, 21</u> <hr/>  |                  |     |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |
| Industrial applicability (IA)  | Claims   | <u>1-21</u>      | YES |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |
| Claims   | <hr/>  |                  |     |             |        |             |     |        |       |  |  |                     |        |                  |     |        |                                   |  |  |                               |        |             |     |        |       |  |  |

**2. Citations and explanations:**

The object of the invention is to solve the problem of pushing services to a terminal located in a mobile network.

Reference is made to the following document/documents:

D1: WO 03019918 A1

D2: 3GPP TR 23.974 V2.0.0 (2001-09); Support of Push service; (Release 5); www.3gpp.org

Document D1 relates to a method that improves mobility and service recovery for a user in a wireless communication network. Service information concerning the user is stored in a registrar. A subscription message is sent from a user terminal to the registrar. A header in the subscription message contains a unique indication. In response to the subscription message containing a unique indication in a header, the registrar returns a notification message to the user terminal. The payload of the notification message includes service information for the user to be used by the user terminal for communication services.

D2 is a standard from 3GPP, which relates to push services.

Claims 1, 8 and 15:

From D1, which is considered to represent the most relevant document, a method is known for pushing services to a terminal located in a mobile network, the method comprising:

subscribing to a push service from a push proxy located across a public network from the mobile network, wherein subscribing to a push service comprises subscribing to a push service on behalf of the terminal;

.../...

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITYInternational application No.  
PCT/IB2005/000576

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.  
Continuation of: BOX V

receiving push content at the push proxy in accordance with the push service (see D1 page 16 line 7 - page 17 line 23);

The claimed invention according to claims 1, 8 and 15 differs from the method in D1 in that the SIP-proxy (push proxy in D1) is capable of establishing a network-initiated data session with the terminal, where after the terminal registers with the SIP-proxy and the SIP-proxy pushes data to the terminal.

Due to these features, the SIP-proxy is able to contact (i.e. via SMS) a terminal without having knowledge of the terminals IP-address.

Consequently, with the background of D1, the problem is to design a method in which the push proxy in D1 is able to contact a terminal without having knowledge about the terminals IP-address.

A solution to this problem is known from document D2, which describes a method for pushing data to a mobile terminal via a push proxy. If the terminal is unreachable by the push-proxy, the push proxy sends an SMS to the terminal to start an PDP-context activation, where after the terminal indicates the activation to a presence server located in the push proxy so the push proxy can start to push data to the terminal (see sections 7.5-7.5.7)

It is therefore considered to be obvious for a person skilled in the art to use the teachings of D2 together with prior-art as specified in D1 in order to achieve a solution according to the claimed invention.

Accordingly, the claimed invention according to claims 1, 8, and 15 lacks an inventive step.

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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITYInternational application No.  
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## Supplemental Box

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Continuation of: BOX V

Claims 2-5, 7, 9-12, 14, 16-19, 21:

In these claims, are other technical features stated for pushing data to a mobile terminal. These claims differ from the claimed invention claimed in previous claims (see above) in obvious details concerning these pushing features. The inclusions of such features are regarded as part of customary praxis a skilled person would consider in accordance with circumstances. From that described in these claims, it is considered obvious for a person skilled in the art, with the knowledge of D1 and D2, to accomplish a method for pushing data to a mobile terminal as stated in these claims. Therefore, the claimed invention claimed in claims 2-5, 7, 9-12, 14, 16-19, 21 is not considered to involve an inventive step.

Conclusion:

The claimed invention according to claims 1-21 is novel, but claims 1-5, 7-12, 14-19 and 21 lacks an inventive step. The claimed invention is industrially applicable.